

### **REMARKS**

Claims 1-12 were examined and reported in the Office Action. Claims 1-12 are rejected. Claims 1, 3, 5, 6, 9 and 10 have been amended. Claim 2 has been cancelled. Claims 1 and 3-12 remain.

Applicant requests reconsideration of the application in view of the amendments and the following remarks.

The drawings are objected to under 37 CFR 1.83(a) because all the features of claims 7-8 and 11-12 are not shown, namely, “peak value sensor” and “error amplifier” as included within the auto-offset cancellation (AOC) of Fig. 6 and Figure 7, and described, for example, at page 6 of the application. In response, Applicant has amended Figure 6 and Figure 7 to show the features of claims 7-8 and 11-12, namely, “peak value sensor” and “error amplifier” mentioned in the specification to overcome the drawing objections. Accordingly, submitted herewith, for filing in the above-identified U.S. Application, are the “corrected drawings” each labeled as “Replacement Sheet” regarding **Figure 6** and **Figure 7**. No new matter has been added.

Approval is respectfully requested.

Claims 5-7 and claims 9-12 are rejected under 35 U.S.C § 112, first paragraph as failing to comply with the enable requirement. In response, Applicant has amended claims 5 and 9 responsive to the ground of rejection as set forth at page 3 of the Action.

Approval is respectfully requested.

Claim 1 is rejected under 35 U.S.C § 102(b) as being anticipated by *Ono* (U.S. Publication No. 2002/0109075). Claim 1 has been amended to add the limitation from claim 2 to overcome the §102(b) objection because the cited reference does not disclose a differential amplifier with a predetermined first input.

Claims 2-4 are rejected under 35 U.S.C § 103(a) as being unpatentable over *Ono* in view of *Ide et al.* (U.S. Patent No. 5,955,921). In addition, Claims 5-12 are rejected under 35 U.S.C § 103(a) as being unpatentable over *Ono* in view of *Hatakeyama et al.* (U.S. Patent No.

6,018,407). In response, *Ono* teaches a DC offset cancellation circuit that is capable of cancelling a DC offset voltage while preventing a signal waveform from being distorted due to accumulation of AC components. It accomplishes handling of a wide range of optical signals by using a differential pre amplifier and adapting the rest of the circuit to match this. The Examiner relies on the Automatic Threshold Control (ATC) circuit of *Ide* as shown in Figure 30 to provide this teaching. However, the ATC of *Ide* requires a single non-differential voltage signal (Input) as input while the *Ono* pre-amplifier produces a differential voltage signal output. Thus, the *Ono* preamplifier circuit cannot be used as the input to the subsequent *Ide*'s automatic threshold control. This would mean that it would require a "substantial reconstruction and redesign of the elements shown in [the primary reference] as well as a change in the basic principle under which [the primary reference] construction was designed to operate". Thus, according to MPEP 2143.01(VI) *Ono* and *Ide* cannot be combined to support a rejection under 35 USC 103.

In addition, regarding claims 5-12, since these claims all depend from Claim 1 and add further limitations thereto, it is submitted that the claims are also patentably distinguishable over the prior art of record.

Furthermore, regarding the rejection of claims 2-4, there is no motivation to combine *Ono* with *Ide*. The Examiner states that "wide dynamic range" is the motivation to combine. But, according to MPEP 2143.01(III), "the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination." However, as noted by the Examiner, *Ono* does not disclose the burst mode optical receiver of claim 2, wherein the single-to-differential converter comprises a differential amplifier which receives a predetermined reference voltage as a first input and the single voltage signal as a second input to output symmetrical differential signals. *Ono* does not teach or suggest an automatic threshold circuit of any type. Although *Ide* does teach an ATC circuit, as noted at column 2 beginning at line 22, although when an input level of the signal is varied, the threshold value can be varied which makes it possible to obtain a good output wave form over a wide dynamic range. However, the threshold level output from the ATC circuit deviates from an original threshold level set by an offset value. Figure 30 of *Ide*, which is the prior art, is provided to show the problem which exists with the prior art circuit. Thus, while *Ide* teaches that it is desirable to obtain a good output wave form over a wide dynamic range, a

person skilled in the art would not be led to use this circuit in combination with *Ono* due to the problems raised by *Ide*.

In view of the foregoing, Applicant submits that it has been demonstrated that substantial changes would need to be made in order to combine the circuits of *Ono* and *Ide*, and a person skilled in the art would not be motivated to make such a combination in any event due to the problems with the *Ide* ATC shown in Figure 30.

Applicant respectfully asserts that claims 1 and 3-12, as they now stand, are allowable for the reasons given above.

In view of the foregoing, it is believed that all claims now pending, namely claims 1 and 3-12 are in condition for allowance and such action is earnestly solicited at the earliest possible date.

If there are any fees due in connection with the filing of this response, please charge those fees to our Deposit Account No. 02-2666. If a telephone interview would expedite the prosecution of this Application, the Examiner is invited to contact the undersigned at (310) 207-3800.

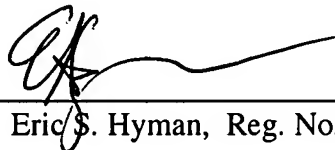
Respectfully submitted,

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Dated:

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By:

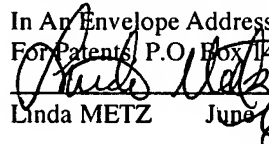


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Linda METZ June 6, 2007